A Persian cat with persistent pupillary membrane (PPM)

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Persistent pupillary membrane (PPM) is a congenital condition. It presents by remaining fetal membrane that persist as strands of tissue crossing the pupil. The pupillary membrane in mammals exists in the fetus as a source of blood supply for the lens. It normally atrophies from the time of birth to the age of four to eight weeks. PPM occurs when this atrophy is incomplete. It generally does not cause any symptoms. The strands can connect to the cornea or lens, but most commonly to other parts of the iris. Attachment to the cornea can cause small corneal opacities, while attachment to the lens can cause small cataracts. Using topical atropine to dilate the pupil may help break down PPMs. In dogs, PPM is inherited in the Basenji but can occur in other breeds such as the Pembroke Welsh Corgi, Chow Chow, Mastiff and English Cocker Spaniel . It is also rarely seen in cats, horses, and cattle. Other breeds may have individual animals with PPM as a problem. They can form attachments between the comea and/or the lens resulting in opacities and cataracts and can cause vision defects. A 6-month-old female Persian cat referred with unilateral PPM in left eye. An examination showed severe PPM in the anterior segment of left eye. It has no attachment to cornea or lens. Then we release her to home and recommend the owner to refer us for laser therapy if it is going to have any changes in her eyes.

A report of transpalpebral enucleation of panophthalmic eyes in *Struthio camelus*: 2 cases

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One of the most common problems in ostrich farming are eye diseases. Ostrich's eyes can be affected by a lot of causes including Mycoplasma spp., Mycobacteria, fungi, trauma which might consequenced to panophthalmitis if remained untreated. Two ostriches were referred to Ferdowsi University Veterinary Hospital. Three-year old, female, weighted 80 kg, with the history of a three-month injury

of left lower eyelid, followed by secondary bacterial infection and panophthalmitis(ostrich1) and four-year old, female, weighted 100 kg, with an old infection in its right eye(ostrich2) were presented.In these two patients, the eyes had to be removed surgically through enucleation. Anaesthesia was induced by a combination of Xylasin (0.5mg/kg), Diazepam (0.5 mg/kg) and Ketamin (25mg/kg) that followed by Isofloran(5% - 2%) inhalatory. After preparation of surgical site, transpalpebral technique was used for eyes enucleation. Through operation period, all of the vital signs were normal. After two days, the patients were examined. In both patients' opposite eyes all the eye reflexes and responses were normal and there were not any signs of bleeding or infection in surgery sites. Sutures were removed two weeks postoperatively. As a result, in patients which are not treated properly and symptoms are getting worse, transpalpebral enucleation technique is suggested.

Bilateral Anophthalmia in a Calf

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During embryogeny of the eye, there is ample opportunity for developmental defects to occur. Anophthalmia is defined as a total absence of ocular tissues. The frequency of bovine anophthalmia and microphthalmia is unknown but appears to be rare. Observations in New Zealand, primarily with Jerseys, indicate that defects of the eye resulting in congenital blindness (including anophthalmia and microphthalmia) occur with a frequency of about one in every 2,800 calves. The syndrome was not limited to a single breed but occurred in Ayrshire, Guernsey, Jersey, Holstein-Friesian, Shorthorn and 4 crossbred calves. The appearance of the eyes was variable. In most cases, the eyelids were closed and the eyeballs were not visible. A 5 month- old female calf from Cross-breed Holstein was referred to Shiraz veterinary school clinic for evaluation of ocular lesion. The calf was blind congenitally. In clinical examination, right eye only had nictitans and other globe was not visible. Left eye had short commissure and no structure was visible. No globes were detectable in palpation of eyes. Calf was able to eat, drink and walk. Other anomalies were not observed. A monogenic autosomal recessive inheritance may have caused bilateral anophthalmia. Chromosomal aberrations could not be detected in the affected calves. The possible environmental causes such as infection by the BVD-virus or oversupply or deficiency of vitamin A are very unlikely.